

Hakan AYDEMİR (Göttingen)

**THE MAIN PILLARS
OF THE TURKIC RHOTACISM-ZETACISM, I.**
sämiz, sämir-, sämri-, semre-

In Altaic research, a cardinal question concerns rhotacism-zetacism, i.e., whether the form with *r* or that with *z* is the primary form. To answer this question, scholars usually refer to words which, in their view, bear the marks of rhotacism or zetacism. Since these words (e.g., *sämiz*, *sämri-*; *köküz*, *kökräk*; *kuduz*, Tkm. *gūdura-*, etc.) serve as models for rhotacism or zetacism, it will not be an overstatement if we regard them as «*the main pillars*» of the arguments for rhotacism or zetacism. However, since the researches relating to rhotacism and zetacism focussed by and large on these words, but have now come to a standstill, advances can presumably be made only if we can clarify the etymological connections between the words in question. This appears necessary because both developments ($r > z$ and $z > r$) are phonologically possible, and it seems that the question can be settled only by means of etymological examinations. Of the three word-groups mentioned above and regarded as the main pillars, only the words appearing in the title will be discussed in this study.¹

It is important to emphasize that, although one of my main aims is to examine the etymologies called Altaic and to distinguish instances that correspond or not to each other, whatever the results of this study may be, (contrary to earlier opinions) they cannot by themselves be utilized to support arguments for or against the Altaic theory, because, as concerns linguistic affinity, the vocabulary itself (correspondences or borrowings) is of no validity as evidence. Thus, I aim to examine here solely whether these instances can be utilized to prove the

¹ The forms *köküz* ~ *kökräk* and *kuduz*, *gūdura-* will be discussed in the next parts of this series. The present study constitutes a part of a long process of research aimed at determination of the lexical correspondences and borrowings primarily between the Turkic and Mongolian languages, and at a better understanding of the Turkic-Mongolian language contacts. The results obtained will hopefully help shed some light on certain questions of the early Turkic and Mongolian languages, and promote clarification of the interrelations between the Altaic languages.

phenomenon of rhotacism or zetacism. I do not aim, however, to take sides in the argument as to whether the phenomenon of rhotacism or of zetacism is correct.

As concerns the words in question, basically two different attitudes have emerged in the literature. Some scholars approach the question only from a phonological point of view (rhotacism or zetacism), whereas others suggest merely a morphological solution.

Although Bang did not describe the phenomenon as rhotacism, he postulated a sound-change $z > r$ in the words *sämiz* and *sämri-* (1916: 1237). Ščerbak (1992: 283; 1992/93: 324) and Róna-Tas (*sämiz* → *sämri-*, 1998: 72; cf. 1970: 658) are of the same opinion and regard these word-forms as instances of rhotacism.

Pritsak introduced the view that *sämiz* is a secondary form bearing the mark of zetacism (1964: 340). The essence of his morphonological solution (i.e., $*r+X > \check{z} > z/\delta$) can be summarized as follows: *sämiz* < $*sämir$ < *sämir*+*X*. According to him, however, the sound value of the morphophoneme *X* is unknown (1964: 341, cf. p. 347).

Poppe considers that the Tg. *semešik* ‘the omentum of the reindeer’ and the Mo. *semeži* ~ *semži* ‘the omentum of domestic animals’ must be regarded as borrowings from Turkic (1974: 120). He holds the view that “Lautgesetzlich würde man im Mongolischen $*sämir$ [...] erwarten” (1962: 331). Posch probably therefore thought the Mo. *semeži* ‘Bauchfett’ to go back to an older form $*semerži$, which would correspond to the Tu. *sämiz* (1964: 28).

Tekin, however, has a different opinion. According to him Mo. *semeži(n)* and Khal. *semj(in)* ‘fat around the intestines, fatty skin around the intestines of animals’ go back to a form $*sämir^2$ through a Tu. $*sämiz$ (i.e., *semeži(n)*, *semj(in)* < Tu. $*sämiz$ < $*sämir^2$). Such examples, in his view, demonstrate that the “Pre-Turkic r^2 first developed, in some cases, into \check{z} before it finally resulted in z ” (1979: 134).

As regards the forms *sämiz* and *sämri-*, according to Tekin: “It is evident that *sämri-* is a denominal verb derived with the suffix *-i-*, simply because there is no such verb-forming suffix as *-ri-* in the Turkic languages” (1969: 57; 1994: 260, 272), and the “original, non-metathetical form of this verb has survived only in the following languages: Nuig. *sämri-*, Tuv. *sämiri-*, and Turkm. *semre-* < *sämri-*. The more common *sämir-* has come into existence as a result of metathesis” (1969: 57, 63; 1975: 275). Further, he believes that “the noun (adjective) from which *sämri-* is derived with the suffix *-i-* cannot be anything but $*sämir$ / $*sämür$ ”, which “might have been the prototype of Middle Turkic *sämüz* / *sämiz*” (1969: 57). In cases such as *sämiz* and *sämri-*, the “doublets in *r* can be best explained as pre-zetacism derivatives” (1979: 135). He asserts that like *sämiz* and *sämri-*, the case of the OTu *sekiz* and *sekri-* ‘to jump, start off (intr.)’ also support the theory of zetacism (1994: 272; cf. Erdal 1991: 480). Tekin’s

view can be summarized as follows: *sämiz* < **sämir*² > **sämir*²+*i*- > *sämri*- (> *semre*-) > *sämir*- (1969: 57, 63; 1975: 275; 1979: 135-6; 1986: 142, 149; 1988: 72; 1991: 145-50; 1994: 260, 272; 1996: 81-3).

Dankoff and Kelly are of the same opinion, supposing a form **sämir* (Dankoff & Kelly 1985: 158). Miller considers it to go back to a verb-form such as **sämir*²- ‘to be, grow fat, fleshy’ (1975: 164).

Erdal believes that *sämri*- can be a rhotacistic derivative from *sämiz* (1991: 323, 480). He states that when the base ends in /z/, this consonant is replaced by /r/ under +*I*- expansion (1991: 480). He regards it as quite unlikely that *sämiz* belongs to the -(X)z formation; the form *sämiz*, otherwise, must be the “base” of *sämri*-, not its derivative (1991: 324; cf. 323). Further, he thinks that “*sämri*- is the original stem with *sämir*- a late variant” (1991: 524). Erdal’s view can be summarized as follows: *sämiz*+*I*- > *sämri*- (> *sämir*-).

The other group of scholars judge the problem to be morphological, and not phonological. It is their belief that, in the case of *sämiz*, *sämir*- and *sämri*-, we are confronted with different suffixes. The first representative of this view was Gabain, who analysed the words in question as *säm-iz* and *säm-r-it*-. The -z here, in her opinion, is a suffix forming an adjective (1950, §135). Ramstedt (1952: 225), Räsänen (*sämi-z*; *sämi-r*-, *säm-r-i*-; 1957: 143, cf. pp. 149 and 152; VEWT: 409b), Menges (*sämi-r*-, *sämi-z*; 1965: 832; 1995: 99) and Büşev (*sämi-r*-, *sämi-z*; 1965: 192, 197; quoted by Tekin 1969: 54) are of the same opinion. Clauson believes that *sämiz* is etymologically connected with *sämri*-. As for *sämri*-, it is a derivative of **sämir*, which is an R-Turkic form of *sämiz* (EDPT: 830ab); i.e., *sämiz* > **sämir* > **sämir*+*i*- > *sämri*-.

As concerns the meaning of the hypothetical verbal stem **sämi*-, only Menges has tried to reconstruct it. He postulates that its meaning might have been *‘to be fat’. He is irresolute, however, as regards the function of the formative -*r*- in *semir*- ‘to be fat’. Its function, in his opinion, might be “intensivum or ingressivum” (1995: 99, 126, 163).

According to Brockelmann, the form *sämri*- must be analysed as *sämri-i*-, where the formative -*i*-, in his view, is an *intensive* (Brockelmann 1954: 199; cf. Erdal 1991: 524-5; cf. *säm-r-i*, Räsänen VEWT: 143; cf. Doerfer 1981-1982: 115-116).

The main forms in the Turkic languages as concerns the word-forms in question are as follows:

OTu: (OTu) *sämiz* ‘fat’, (DLT) *sämri*- ‘to be, or become fat’; (BTT II) *sämirt*- ‘mästen (den Körper)’; **MTu:** (CCI) *sämiz* ‘fett’, (CCG) *sämir*- ‘fett werden’; (TrTTS) *semizi*- ‘semizleşmek, tavlanmak, semirmek’; **NTu:** **O** (Gag.) *semiz* ‘žirnyj; otkormlennyj; polnyj, tučnyj; mjasistyj’, *semir*- ‘žireť, polneť, tučneť’; (Tr.) *semiz* ‘fat, fleshy, overweight’, *semir*- ‘grow fat’, (TrDS)

semüz ‘besili, semiz, şişman’, (TrDS) *semir* ‘şişman’, (TrDS) *sem-*, *semre-*, *semri-*, *semür-* ‘büyümek, beslenmek, gelişmek’, cf. (TrTDS) *semiz* ‘büyük, besili, gelişmiş’; (Az.) *sämiz-* ‘tučneť, polneť, stať žirnym, gruznym’; (Tkm.) *semiz* ‘žirnyj; tolstyj, polnyj, tučnyj; upitannyj’, *semre-* ‘tolsteť, polneť, žireť, tučneť, popravljaťsja’; (Khoras.) *sämiz*, *sä'mmiz* ‘dick’; **K**: (Tat.) *simez* ‘žirnyj, upitannyj; polnyj, tučnyj’, (TatBa.) *sämis* ‘žirnyj’, (TatBulg.) *semiz* ‘fat, greasy’, (Tat.) *simer-* ‘žireť, razžireť, ožireť, polneť, raspolneť, stanovitsja (stať) žirnym, upitannym, polnym, tučneť’, (TatSib.) *sämer-*, *sämre-* ‘tučneť, razžireť’, (TatBulg.) *semir-* ‘to grow fat, put on weight, become greasy’; (Krtat.) *semiz* ‘žirnyj, tolstyj, polnyj’, (Kr-tatBas.) *semis* ‘fat, fattened’; (KarH, KarT) *sëmiz* ‘žirnyj, otkormlennyj, polnyj’, (KarT) *semiz'* ‘žirnyj, tučnyj’, (KarT) *semir-* ‘tolsteť, polneť’, (KarH, KarT) *sëmir-* ‘polneť, tolsteť’; (Kbalk.) *semiz* ‘žir; polnyj, upitannyj, tučnyj’, *semir-* ‘žireť, tučneť, nabirať žir; polneť’; (Kmk.) *semiz* ‘žirnyj, tučnyj; polnyj, upitannyj’, *semir-* ‘žireť, tolsteť; polneť’; (Nog.) *semiz* ‘žirnyj; upitannyj; polnyj, tučnyj’, *semir-* ‘žireť, nabirať žir (o životnyh); polneť, tučneť, popravljaťsja’; (Kirg.) *semiz* ‘žirnyj, tučnyj’, *semir-* ‘žireť, tučneť’; (Kklp.) *semiz* ‘tučnyj, žirnyj, upitannyj’, *semir-* ‘polneť, tolsteť, žireť’; (Kzk.) *semiz* ‘žirnyj; upitannyj; tučnyj’, *semir-* ‘žireť, tučneť; polneť, tolsteť’; **T**: (Uig.) *semiz* ‘žirnyj, upitannyj, polnyj, tučnyj, tolstyj’, (UigMal.) *sämiz* ‘žirnyj’, (Uig.) *sämri-* ‘žireť, polneť, tolsteť’, (UigMal.) *semir-*, *sömär-* ‘žireť’, (UigSin.) *sämri-* ‘žireť’, (UigJar.) *semir-*, *semir-*, *semej-* ‘to grow fat, to fatten’, *semiret-* ‘to cause to grow fat, to fat up’, (UigRaq.) *sëmirät-* ‘to grow fat’; (YUig.) *semüz*, *semiz* ‘žirnyj’, *semir-* ‘byť žirnym, tučnym’; (Sal.) *semus*, *simus* ‘žirnyj, žirno’, (SalKak.) *sems* ‘gras’; (Uzb.) *semiz* ‘tolstyj, polnyj, tučnyj, žirnyj; upitannyj’, *semir-* ‘polneť, tolsteť, tučneť, žireť’; **SSib**: (Oir.) *semis* ‘žirnyj, tučnyj, sytyj, otkormlennyj’, (OirKu.) *sebis*, *sebiz*, *semiz* ‘žir, žirnyj, tučnyj, polnyj’, (OirTu., OirTeRSK) *semis* ‘žirnyj // semiz, şişman’, (OirCha.) *sebiz*, *sebis*, *sevis* ‘žirnyj’; (Oir.) *semir-* ‘žireť, tolsteť, polneť, tučneť’, (OirKu.) *sebir-*, *sibir-* ‘žireť’, *sepir-* ‘tolsteť’, (OirTu.) ‘polneť, tučneť, žireť’, (OirCha.) *sebir-*, *sevir-*, *semir-* ‘žireť, tolsteť’; (ShorKo.) *sebis* ‘žir; žirnyj, tučnyj’, *sebir-* ‘žireť’; (Khak.) *simis* ‘tučnyj, polnyj, tolstyj, otkormlennyj, upitannyj, žirnyj’, (KhakKo.) *sîmis* ‘fett’, (KhakSalb., KhakKand.) *sëmis* ‘fett’, (Khak.) *simir-* ‘žireť, tolsteť, polneť’, (KhakKo.) *sîmir-* ‘fett werden’; (Tuv.) *semis* ‘žirnyj, tučnyj, otkormlennyj; polnyj, tolstyj’, (TuvCast.) *sîmis* ‘fett’, (Tuv.) *semiri-* ‘stanovitsja žirnym (tučnym, upitannym), tučneť; poravljatsja, polneť’, (Tofa) *semis* ‘žirnyj; tučnyj, otkormlennyj’, (TofaCast.) *semes* ‘fett’, (Tofa) *semiri-* ‘žireť, tučneť, stanovitsja upitannym’, (TofaCast.) *semer-* ‘fett werden’; **Kh**: – ?; **Y**: (Yak.) *ämis* ‘žirnyj; tučnyj, upitannyj’, (Dolg.) *ämis* ‘fett (vom Fisch)’; **Ch**: (Chuv.) *samär* ‘tučnyj, žirnyj, tolstyj, polnyj, upitannyj’, (ChuvAšm.) *samärt-* ‘raskormit’.

I believe that the statement that «the problem is morphological, not phonological» is basically correct and that, as concerns the etymological explanation of these words, «we must set out from a verb-form such as **sämi-*». This supposition, however, has not yet been substantiated by facts. This is one more reason why excellent Altaic scholars presume that «the problem is not morphological, but phonological». In my view, however, the bare phonological explanation runs into difficulties.

The view expressed by Bang, Ščerbak and Róna-Tas, and in general the view that a change $z > r$ occurred in the words in question, or the explanation by Pritsak of its morphonological nature, based on zetacism ($r > z$), encounter problems: **1)** Phonologically, both changes ($z > r$ or $r > z$) might have occurred in these words. This means that an examination based on phonology cannot help solve the question. **2)** Much more important, explanations based merely on phonology do not clarify the etymological background of the words in question, and particularly the word-forms *sämiz* or **sämir* / **sämir*².

The supposition of Poppe and Tekin that the Mo. *semeji(n)*, *semj(in)* go back to a form such as the Tu. **sämir*, may be phonologically possible, but there exists a more probable explanation. This word-form, in my view, is an inner-Mongolian development and must be analysed as **seme-ji* (< *sime-ji*) / **seme+ji* (< *sime+ji*). Thus, it cannot be taken as a Turkic loan-word in Mongolian. The question will be discussed more fully below.

Tekin's view, based essentially on zetacism, involves numerous uncertainty factors. All of Tekin's statements concerning the word-forms *sämiz*, *sämir*-, *sämri*- and *semre*- are based only upon hypotheses, except for the one to the effect that "there is no such verb-forming suffix as *-ri-* in the Turkic languages" (1969: 57), in which I agree with him. Tekin's view is based on a hypothetical form **sämir*². This view, however, *independently of what we think of rhotacism or zetacism*, cannot be accepted, and **sämir*² cannot be taken as a base form because **1)** Tekin does not give an etymology of the form **sämir*². **2)** Thus, we cannot know whether there is an r^2 (**sämir*²) or a z (*sämiz*) as the word ending in reality. **3)** Consequently, we cannot speak of a change $r^2 > z$ either in the word-forms *sämiz*, *sämri*- or in the OTu *sekiz*, *sekri*-, or in other such word-pairs which can come into question. **4)** Further, we cannot know either which is primary or secondary among the verb-forms *sämir*-, *sämri*-, *semre*-. **5)** Accordingly, we cannot speak of the phenomenon of «pre-zetacism» either. All this holds as concerns the views of Miller (**sämir*²-), and Dankoff and Kelly (**sämir*).

² The idea that this form may possibly be a derivative has not yet been considered by those scholars who regard the postulated word-forms **sämir*² / **sämir* as the original forms.

It is also difficult to agree with Erdal that “*sämri-* can be a rhotacistic derivate from *sämiz*” (1991: 323, 480). The counter-arguments that I have advanced in connection with Tekin’s views also hold as concerns the view of Erdal, because Tekin and Erdal agree that the form *sämri-* is a derivation with the formative *+I-*, while the form *sämir-* is a late variant (Tekin, 1969: 57; 1994: 260-261, 272; Erdal, 1991: 480). The opinion of Erdal differs from that of Tekin (**sämir²+i- > sämri- > sämir-*) only in that the former sets out from a form *sämiz* (i.e., *sämiz+I- > sämri- > sämir-*, *ibid.*).

The words under discussion require a morphological solution. Accordingly, I agree with Gabain, Ramstedt, Räsänen, Menges and Biišev that in the case of *sämiz* and *sämir-* we must speak of the formatives *-z* and *-r-*. This supposition, however, **1)** has not yet been supported by morphological criteria, **2)** leaves the hypothetical verbal base **sämi-* unexplained, **3)** and does not clarify its connection with the verb-forms *sämir-*, *semiri-*, *sämri-*, *semre-*, *sèmirät-*.

It is difficult, however, to agree with Clauson that *sämri-* is a derivative of **sämir*, which is an R-Turkic form of *sämiz*; i.e., *sämiz > *sämir > *sämir+i- > sämri-* (s. EDPT: 830ab).³ I agree with Brockelmann that this verb-form must be analysed as *sämir-i-*. Nevertheless, I do not agree with him that this *-i-* must be regarded as an intensive. I shall discuss this problem more fully below under *sämri-*.

**sämi- / *sämi-*

The etymological suggestions discussed below are based upon the hypothetical verb-form **sämi-*. The etymological explanation of the word-forms *sämiz*, *sämir-* ~ *sämri-* ~ *sämiri-* ~ *semre-* depends on this verb-form.

The sure ground from which we can set out to explain the word-forms under discussion is the verbal stem TrDS *sem-*, meaning (like the verb-forms

³ As concerns the Chuv. *samär*, it remains certain that there was a form **sämir* in early R-Turkic. The further part of the question, however, is rather uncertain. For this reason, all these suppositions must be built upon «a chain of suppositions». That is, in this case we must suppose (among others) that **1)** the suppositional R-Turkic form **sämir²/*sämir* passed into one of the Old or Proto-Turkic languages, the formative *+I-* was added to it, and the form *sämiri- > sämri-* emerged and was generally received in the late Old Turkic period. If we accept this, then the question must also be answered why the R-Turkic form *sämri-*, and not the common Turkic form *sämiz+I- > sämizi-/*sämzi-* became general; **2)** or it must be assumed that the derivation **sämir+I- > sämiri-/sämri-* had already occurred in the R-Turkic language (i.e., in Pre-Turkic), and this R-Turkic form has been preserved in Common Turkic. Such a supposition, however, seems to be at variance with the fact that the verb-form **sämri-* is not attested in Chuvash or its ancestor.

TrDS *semre-*, *semri-*, *semür-*) ‘büyümek, beslenmek, gelişmek’ (cf. TrTDS *semiz* ‘büyük, besili, gelişmiş’). This meaning, however, is certainly secondary because the original meaning of *semre-*, *semri-*, *semür-* are well attested in Old (DLT *sämri-* ‘to be, or become fat’) and Middle Turkic (CCG *sämir-* ‘fett werden’). Thus, with some reservations we can accept the *‘to be fat’ reconstruction by Menges as concerns the hypothetical verb-form **sämi-*.

However, on the basis of the general lessons of historical semantics, the analogies in foreign languages, the meanings ‘to be/become fat, grow fat, put on weight, become greasy/fatty, etc.’ and the logical arguments, I consider that the meaning ‘to be/become fat, etc.’ of the former and present forms *sämri-/sämir-*, is secondary and has emerged as a result of changes in the direction concrete → abstract through the semantic changes and/or extensions: *‘to absorb, soak up, suck up (a liquid/fluid as nutriment)’⁴ → ‘to put on weight/flesh’⁵ → ‘to grow/become fat(ly)’⁶. In consequence of the lack of a relatively large amount of inner-Turkic material, it is difficult for the time being to demonstrate this process of change and/or extension in Turkic categorically, but the Buriat and Manchu instances afford unanimous evidence of such a sense-transformation.⁷

From the point of view of the etymologies discussed here, it is actually of minor importance to determine or reconstruct the primary meaning of the verb-forms *sem-* or **sämi-*, because the problem in this case is not semantic, but morphological.

⁴ Cf. WMoL *sime-* (~ *simi-*) ‘to draw a liquid into the mouth, suck up or in; to sip’ and Manchu *sime-* ‘durchfeuchten, durchtränken; befeuchten, befruchten, bereichern, begnaden’.

⁵ Cf. TatBulg. *semir-* ‘to put on weight, etc.’.

⁶ A similar semantic extension occurred, for example, in Buriat (*šëmë* ‘sok; pitatel’nost; upitannost’ < WMoL *sime* ‘sap; essence, elixir, extract; nourishment, etc.’), where the meaning ‘upitannost’ // fat(ness)’ has obviously emerged secondarily. It can be mentioned as a semantic parallel that, besides the meaning ‘oil, fat, grease’, Tr. *yağ* also has the meaning ‘moisture’. Further, the adjectival form of this word, *yağlı*, has also the meaning ‘besili, semiz’ and ‘dick, feist, rundlich, fett’, besides the meaning ‘fatty, oil, greasy’. The meaning of the Manchu *simenggi* ‘Baumöl, Firniß’ developed from the Manchu *sime-* (= Mo. *sime-*) ‘durchfeuchten, durchtränken; befeuchten, befruchten, bereichern, begnaden // to soak, moisten into’, and this indicates that the meaning ‘moisture (as nutriment)’ is primary whereas the meaning ‘fat, oil’ has emerged secondarily.

⁷ The attributive constructions such as the Gag. *semiz yer* ‘žirnaja (plodorodnaja) zemlja’ and the Uzb. *semiz tuprok* ~ *semiz yer* ‘plodorodnaja počva, žirnaja počva’ seem to support the above-mentioned semantic change and/or extension. The meaning of *semiz* here obviously refers to the «moisture-content» of the soil or ground. The situation, of course, is the same in the case of the Tr. *semiz otu* ‘purslane’, a plant species whose leaves and body «stock much water». This means at the same time that the primary semantic content of the former verbal base has been preserved in these constructions.

As concerns the analyses **sämi-z* (> Tu. *sämiz*), **sämi-r-* (> Tu. *sämir-*, ChuvAšm. *samär-t-*), **sämi-r-I-* (> Tuv., Tofa *semiri-*), **sämi-rA-* (> TrDS, Tkm. *semre-*, TatSib. *sämre-*, UigRaq. *sèmirät-*, UigJar. *semire-t-*, TrDS *semirek* ‘şişmanlama, semirme’), I consider that the TrDS *sem-* may go back to an earlier form **sämi-* (~ **säm-*). The lack of the final **-i-* in the TrDS *sem-* can probably be explained by a supposition that the Proto-Turkic high vowels in the final position were reduced and gradually disappeared in Old Turkic, as demonstrated by Johanson. Although the UigRaq. *sèmirät-*, UigJar. *semiret-* (< **sämi-rA-t-*) and TrDS *semirek* (< **sämi-rA-k*) lead me to believe that the primary base must have been **sämi-*, it is also possible, of course, that the TrDS *sem-* goes back not to **sämi-*, but to a form **säm-*.

sämiz

As concerns the word-form *sämiz*, two fundamental questions must be answered: **1)** Does *sämiz* really go back to a form such as **sämir²/*sämir*, understood as the «base» of the forms *sämri-*, *sämri-*, *semiri-* and *semre-* by the supporters of the zetacism theory? **2)** If not, then can it be proved that the *-z* here is an adjectival suffix?

If we examine the arguments for or against both views, we can ascertain that the solution based upon zetacism, i.e., that *sämiz* goes back to a form **sämir²/*sämir* (as I have pointed out above in connection with Tekin’s view) is extremely hypothetical and for this reason cannot be accepted. It is a fact, however, that we do have a verbal base *sem-* (< **sämi-*) serving as firm ground for the etymology of the form *sämiz*. A new question arises at this point: How can the connection between the verbal base *sem-*, or rather **sämi-*, and the formative *-(X)z* be explained?

According to Erdal, “It seems quite unlikely that *sämiz* [...] belong[s] to the *-(X)z* formation”; this must be the base of *sämri-*, not its derivative (1991: 324). He claims that “the matter will not get completely clarified before Turkic rhotacism is exhaustively described” (ibid.). I do not agree with this opinion and I consider that from the morphological, phonological and semantic points of view the analysis **sämi-(X)z* is unexceptionable. From the morphological and partly semantic points of view, the forms DLT *yumuz är* (< *yum-(X)z*) ‘a short, stout, fat man’ and Tr., TrDS *tıkız* (< *tık-(X)z*) ‘kısa boylu, şişman, yağlı’ both speak in favour of this solution. The *-ü-* in *sämüz* is secondary and has developed from the *-i-* of the primary form *sämiz* under the labializing influence of the *-m-* (i.e., *sämiz* > *sämüz*). Accordingly, Tekin’s view that *sämüz* goes back to a form **sämür* (1969: 57) is not tenable.

On the basis of the facts detailed above, it can be excluded that the form *sämiz* developed from a hypothetical “Proto-Altaic” or “Pre-Turkic” form such as **sämiz*⁸ (and still less from a **sämri-z*). Thus, as for *sämiz*, «*the supposition of zetacism is not reasonable*»; «*it appears more reasonable to consider the phenomenon as rhotacism*» in the case of the TrDS *semir*⁸ ‘şişman’, which has not been considered to date, and the Chuv. *samär* (< **sämiz*), unless it belongs to a formation with a suffix **(X)r*. This can come into question, however, only if such a suffix can be confirmed to have existed.⁹ Even if a suffix such as **(X)r* can be established, it is hardly to be expected that the Tu. *sämiz* (< **sämi-z*) and the TrDS *semir* (< **sämi-r*) have derived from the same base through different formations in common Turkic and in the ancestor of Chuvash.

With respect to the forms WMoL *semeji(n)*, *semeje*,¹⁰ my opinion is as follows: 1) the Mo. *semeji(n)* can be analysed as **seme+ji*, where the formative *+ji* is the well-known denominal noun-forming suffix in Mongolian (s. WMoL *dumda* ‘average, etc.’ ~ *dumdaji* ‘average, mean’; *ilyam* ~ *ilyamji* ‘difference’, etc.). Otherwise, as stated by Poppe: “Die mit *-ji* gebildeten Nomina bezeichnen Körperteile, aber auch Lebewesen und sogar Eigenschaften” (1973: 234). However, he also added that “Die betreffenden primären Nominalstämme kommen meistens nicht frei vor und die Ausnahmen [...] sind nicht zahlreich” (ibid.). The Mo. noun **seme* (> KbalkT *seme*), too, developed from the WMoL *sime*,¹¹

⁸ On the basis of the dialectal material from Turkey, the word-form can be confirmed only from the village of Müsgebi in the district of Bodrum of the city of Muğla (s. TrDS 12: 4682b). With regard to the ethnic and dialectal variegation of Anatolia, it can be assumed as a working theory that the TrDS *semir* (as a predecessor of the Chuv. *samär*) preserves the memory of the language of the Bulgar-Turks who (after their integration into the Golden Horde) were assimilated into different Kuman-Kipchak tribes and settled down in different areas of Anatolia together with them.

The records in the domesday book of the province of Adana dated 980 of the He-gira, such as «*Cemâat-ı Kıpçak tâbi-i Bulgarlu*», *Cemâat-ı Ordu-ı Bulgarlu*, *Cemâat-ı Halil Beylû tâbi-i Bulgarlu*, *Cemâat-ı Balcı tâbi-i Bulgarlu* (Akın 1946: 7-8), and tribes or/and clans (*Cemaat*) in the Ottoman archives such as *Bulgar*, *Bulgarlı* (*Bulgarlu*), *Bulgar Şeyhlü* (Türkay 1979: 260) seem to support the above supposition. This means at the same time that we must take other Anatolian dialectal word-forms of the Bulgar-Turkic nature into account.

This word-form, of course, may belong to an **(X)r* formation, if such a suffix could be confirmed to have existed. The final word in connection with this question will be provided by the results of further researches.

⁹ Cf. Erdal 1991: 390.

¹⁰ ‘Fat around the intestines; epiploon; fatty skin around the intestines of animals, fat of the epiploon; thin layer of fatty tissue on the cud pouch or rumen’.

¹¹ ‘Sap; essence, elixir, extract; nourishment, nutritiousness; quintessence, substance; vital principle; force, vigor’. It should be noted that the semantic reconstruction “**seme*- ‘нутряной жир’” of Dybo (1996: 14) is not tenable. As I have shown above (s. notes 4-7), the meaning ‘fat’ has emerged secondarily in the process of

which I regard as the base of *semeji* (< **seme*+*ji*), and is presumably one of these few exceptions. The meaning ‘upitannost’ // fat(ness)’ of the Buriat form *šémě* (< *sime*) ‘sok; pitatelnost; upitannost’, and the meaning and «phonetic form» of the KbalkT *seme* ‘semiz, dolgun’ seem to support this supposition. The primary Mongolian form must have been **simeji*, from which, as a result of a backward assimilation (probably under the influence of the phonetic form of **seme* < *sime*), the WMoL *semeji(n)* first developed and then *semeje* (i.e., *sime*+*ji* > *semeji(n)* ~ *semeje*).¹² 2) The other probable solution may be the analysis *sime*-*ji* > *semeji(n)* ~ *semeje*. For the deverbal noun-forming suffix -*ji*, see Poppe 1976: 472; for the base, see WMoL *sime*- (~ *simi*-) ‘to draw a liquid into the mouth, suck up or in; to sip’; as a semantic parallel, cf. the Manchu *simenggi* ‘Baumöl, Firniß’ (< Manchu *sime*- ‘durchfeuchten, durchtränken; befeuchten, befruchten, bereichern, begnaden’).

Tekin’s supposition that the forms Mo. *semeji(n)* and Khal. *semj(in)* go back to the Pre-Turkic **sämir*² through a Turkic form **sämiž* (i.e., *semeji(n)*, *semj(in)* < **sämiž* < **sämir*²) (1979: 134), is not reasonable and cannot be utilized to prove that the “Pre-Turkic *r*² first developed, in some cases, into *ž* before it finally resulted in *z*” (ibid.).

The view of Räsänen (VEWT: 409b) and Poppe (1974: 120) that the Tg. *semesik* ‘saġnik (u olenja); žir’ is taken from the Tu. *sämiz* is not self-evident and requires further examination.

sämir-

In the light of the TrDS *sem-* (< **sämi*- ~ **säm*-), I consider that the change *sämri-* > *sämir-* postulated by Tekin and Erdal is not tenable. The ChuvAšm. *samärt-* ‘raskormit’ and the OTu *sämirt-*, which have not been considered to date, unambiguously contradict their supposition. As a matter of fact, these Chuvash and Old Turkic forms are obviously derivations from the verb-form **sämir-* (> **sämir-t-* > OTu *sämirt-* / Chuv. *samärt-*, cf. the Tr. *semirt-*). This fact at the same time furnishes clear-cut evidence from lexicological and chronological points of view that the history of the form *sämir-* (attested only from Middle Turkic on) actually goes back to ancient times.

On the basis of the above arguments, I consider that the form *sämir-* must be analysed as **sämi-r-* (or **säm-(I)r-*?), where the -*r-* is the formative taken as inchoative (or ingressive).

sense-transformation. For this reason, its primary meaning cannot be ‘нутряной жир // fat around the intestines’.

¹² For the first syllable alternation *i* ~ *e*, cf. the WMoL *čige(n)* ~ *čege(n)* ‘mare’s milk, kumiss’, *isegei* ~ *esegei* ‘felt’.

sämri-

The fundamental question accompanying the form *sämri-* is whether or not a deverbal verb-forming suffix *-I-* can be confirmed to have existed in Old Turkic. According to Erdal, such a suffix *-I-* cannot be assumed to have existed in Turkic. He remarks, however, that “We are still left with a few real candidates for comparatively early *-I-*” (Erdal 1991: 524-5). In my opinion, however, a suffix *-I-* can be confirmed to have existed in Turkic.

Before surveying the derivatives with the formative *-I-* that come into question in Old Turkic, let us examine this suffix in the modern Turkic languages, without aiming at completeness. My main consideration in the selection of the examples was the ability to confirm the existence of a suffix *-I-* in at least three Turkic language branches.

Tuv. *ékiri-* ‘vyzdoravlivať, popravljajšja, vylečivašja, izlečivašja; zaživat’ (o rane)’ (< *éki+r-I-*), *éki* ‘horošij’ (cf. Tofa *ékkir-* ‘id.’ < *ékki+r-* < Tofa *ékki*) < OTu *äðgü*.

Tofa *è"siri-* ‘pjanet’, hmelet’ (< *èsir-I-*) < **äsir-* > OTu *äsür-* ‘to be, or become drunk, intoxicated’.

TrDS *sarhı-* ‘(meyve/sebze) buruşmak, pörsümek // to become puckered / wrinkled / withered, to shrivel up’ (< *sark-I-*) ~ TrDS *sarh-*, Tr. *sark-* ‘sarkmak // to hang down’ < OTu *sark-*.

TrDS *dizi-* ‘dizmek // to arrange in a row/series’ (< *tiz-I-*) ~ Tr. *diz-* ‘id.’ < OTu *tiz-*.

Uig. *sanči-* ‘vonzať, kolot’, tykať, vtykať’ (< *sanč-I-*), cf. Tr. *sanç-* ‘id.’ < OTu *sanč-*.

Uig. *kizi-* (~ *kiz-*) ‘nakaljašja, raskaljašja; nagrevašja, razogrevašja, sogrevašja’, Uzb. *kizi-* ‘nakaljašja, raskaljašja’, Kirg. *kizī-* ‘id.’ (< *kiz-I-*) < OTu *kiz-*.

As concerns the instances in Old Turkic, I consider that the formative *-I-* can clearly be confirmed in more than three cases here, too. A further example is the DLT *kazī-* ‘to excavate (ground); to scrape off (scab)’, which is evidently a derivative from DLT *kaz-* ‘to dig out’ with the formative *-I-* (i.e., *kaz-I-* > *kazī-*). Erdal is sceptical in this respect (s. Erdal 1991: 525). According to Tekin, however, the DLT *kazī-* “seems to be diminutive (or frequentative?) stem” (Tekin 1994: 274). Another example is the DLT *üti-* ‘to iron’, derived from the DLT *üt-* ‘to singe’ (i.e., *üt-I-* > *üti-*).

The verb-form *simri-* ‘to swallow’ (~ *simir-* ‘id.’ = DLT *simür-*) in Maitrisimit also evidently belongs to the *-I-* formation. I do not agree with Erdal’s opinion that the “original form” of the Maitr. *simir-* and the DLT *simür-* ‘to swallow in a single gulp’ was *simri-* (s. Erdal 1991: 720). His statement that “*simri-* can’t be a variant of *siñir-* (a derivative!) [‘to gulp down, swallow’] but

must be related to *šimi-* in Mo., Secret History and elsewhere”, however, necessitates exactness and some additions. The connection between the Tu. *simri-* and the Mo. *šimi-* is obviously indirect and the two word-forms belong together only on an etymon level; the Mongolian form goes back to a base **simi-*¹³ (> WMoL *simi-* ‘to sip/suck’), whereas the forms *simri-*, *simir-* in Maitrisimit connect with this base **simi-* through the formation **simi-r-* > Maitr. *simir-* > *simir-I-* > Maitr. *simri-*. It appears that, besides **simi-*, there was also a form (**simi-* >) **sim-* (> CC *sim-* ‘id.’) in early Turkic, and the DLT *simür-* (< **sim-ür-*) may be its derivative.

Mention must also be made here of the Old Turkic forms *sekri-* ~ *sekiri-* ‘to jump, start off (intr.)’. I do not agree with Erdal that these are derivatives from the Maitr. *sekiz* with the formative *+I-* (i.e., *sekri-* ~ *sekiri-* < *sekiz+I-*, Erdal 1991: 480, 785). According to Tekin, this is a doublet “supporting the theory of zetacism” (Tekin 1994: 272). Tekin’s view is not reasonable, and thus this doublet cannot be used to support the theory of zetacism. The fact is that there was and even still is a deverbal verb-forming suffix *-I-* in Turkic, but it is not so productive and cannot be demonstrated in every Turkic language. In Proto- or Pre-Turkic, it must have been relatively productive. Furthermore, we have every reason to suppose that a verb-form **sek-* ~ **säk-* (> MTu. *säk-* attested first in the 14th c.) ‘to hop, leap; to run in a series of jumps, etc.’ existed in early Turkic. The Hungarian verb-form *szök(-)* ‘to leap, jump, etc.’, borrowed from Turkic, points to an early Turkic form **sek-* ~ **säk-*, and the Old Turkic verb-forms *säkirt-* ~ *sekirt-* ‘to make the horse (or other) gallop’, which can be analysed as **sek-(I)r-t-* and **säk-(I)r-t-*, also speak in favour of this supposition. The base *sek-(I)r-/säk-(I)r-* of the verb-forms *säkirt-* ~ *sekirt-* can for the time being be confirmed only from CCI (where it appears as *säkir-*), but this, of course, does not mean that such forms could not have existed in the early period. On the basis of above arguments, I consider that the Old Turkic forms *sekiz*, *sekri-* ~ *sekiri-* must be analysed as *sek-(X)z* > *sekiz* and *sek-(I)r-I-* > *sekiri-* (> UigJar. *sekeri-* ‘to jump’) ~ *sekri-*.

The instances in Old and New Turkic demonstrated above furnish clear-cut evidence that the verb-form *sämri-* is also derived by means of the formative *-I-*. Accordingly, the OTu *sämri-* must be analysed as **sämi-r-I-* (? **säm-(I)r-I-*). This form has otherwise been preserved as *semiri-* ‘žireť, tučneť’ in Tuvinian and Tofa. This means at the same time that there may have been a form **sämir-* (cf. BTT II *sämirt-*, ChuvAšm. *samär-t-* < **sämir-*) in early Turkic.

As concerns the formative *-I-* itself and its function, for the time being as a working theory and a starting-point, I consider that the *-I-* is a formative refer-

¹³ The Manchu *sime-* discussed above and the New Korean *sūmi-* [*šimi-*] (< **simi-*) ‘to soak into, etc.’ also belong here in all probability. For the corresponding form in Japanese, s. Miller 1987: 43.

ring to the type of action (*Aktionsart*) or rather to the aspectual character of the verb, i.e., a kind of *aspect-formative*, which appears to *denote the resultative (perfective) character of the semantic content described by the base verb*. The reason why I suppose this is that, unlike the meanings of the verb-forms *kaz-* ‘to dig (out)’ and *sark-* ‘to hang down’, the meanings of the verb-forms such as *kazı-* ‘to excavate (ground); to scrape off (scab)’ and TrDS *sarhı-* ‘(meyve/sebze) buruşmak, pörsümek // to become puckered/wrinkled/withered, shrivel up’ are evidently of a resultative nature, i.e., while the meanings of the two previous examples can be regarded as progressive (*imperfective*), the meanings of the latter have a semantic content unambiguously denoting the result and final stage (*perfective*) of the action.¹⁴ This type of *aspectual opposition/difference* could possibly also have existed earlier between the verb pair *semir-* ~ *semiri-/semri-*.

semre-

As concerns the word-form *semre-*, in contradistinction to Tekin (1969: 54, 57, 63; 1996: 82), I consider that the base of the forms such as the Tkm. *semre-*, the TrDS *semre-*, the TatSib. *sämre-*, the UigRaq. *sëmirät-*, the UigJar. *semire-t-* and the TrDS *semirek* was **sämi-rA-*, and not **sämir²-* as Tekin thinks.¹⁵ Unlike Mongolian, where it is quite productive, the formative *-rA-* is less productive in Turkic. It basically forms *medial verbs*, and the verbal base to which it is attached can be both transitive and intransitive. According to Tekin, the *-rA-* alternates with the formative *-(I)r-* regarded as inchoative (*-rA-* ~ *-(I)r-*), just because of its *inchoative* character (Tekin 1995: 177, 182-183).¹⁶ For the phenomenon, see the following cases: TrDS *esir-* ~ *esre-*¹⁷ ‘to be/become drunk’, Tr. *köpür-* ~

¹⁴ On the basis of the above statements, it should be noted that the same *aspectual opposition* can also be observed in the case of the Tr. *sür-* ‘to drive away/on’ (= *imperfective*), Tr. *sürü-* (< *sür-U-*) ‘to drag along the ground’ (= *perfective*), and the Tr. *tık-* ‘to thrust, squeeze or cram (into)’ (= *imperfective*), Tr. *tıka-* (< *tık-A-*) ‘to stuff up; to plug; to gag’ (= *perfective*), etc. There are many other examples of this type in different Turkic languages, which necessitate detailed examination.

¹⁵ In the light of the TrDS *semir* and the Chuvash form *samär*, an analysis **sämir+A- > sämrä-* (but not **sämir²+A-*) might also come into question. I do not exclude this possibility, but such a supposition runs into many difficulties, which I have already advanced (s. note 3) in connection with the improbability of the analysis **sämir+I- > sämiri-/säMRI-*. My objections mentioned there also hold as concerns the analysis **sämir+A-/*sämir²+A-*.

¹⁶ According to Menges, however, it denotes an *ingressive-transgressive* aspect (Menges 1995: 96-7, 244).

¹⁷ *esir-* ‘sarhoş olmak // to be/become drunk’ < *es-(I)r-* < TrDS *es-* ‘esnek olmak, sallanmak // to be bent, to be about to fall, totter, swing’ > *es-rA-* > TrDS *esre-* ‘id.’ < OTu. *äs-* (cf. TrDS *esir-* ‘sallanmak // to be about to fall’). The meaning ‘to be/be-

Tkm. *köpre-* ‘peniſsja // to froth, foam’, TrDS, CCI *säkir-* ~ UigJar. *sekre-* ‘to jump’, Tr. *semir-* ~ TrDS *semre-* ‘to grow fat’, etc.

Erdal’s view that the formative *-rA-* (his *°rA-*) is added only to onomatopoeic words (Erdal 1991: 469-74) is not reasonable. Numerous instances attested in Old and New Turkic (s. below) unambiguously contradict this.¹⁸

I agree with Tekin that there are derivatives in Old Turkic that belong to the *-rA-* formation, such as *kävrä-*, *kokra-*, *sačira-* ~ *sačra-*, *sawra-* and *sädrä-*¹⁹ (s. Tekin 1995: 183). I would like to add to his statement simply that the IrkB *yaδrat-* ‘to make (a horse) lie on the ground’, with non-evident etymology, also belongs here and must be analysed as *yaδ-rA-t-* (for a different explanation of it, see EDPT: 893b). The form *yaδrat-* and the reflexes of its base **yaδra-*, can otherwise be confirmed from some of the modern Turkic languages (s. below). Thus, the Old Turkic form *yaδrat-* (< *yaδ-rA-t-*) must also be considered as derived by means of the formative *-rA-*, which confirms at the same time the existence of a formative *-rA-* besides *+rA-* in early Turkic. To demonstrate the derivatives with the formative *-rA-*, we can instance (among others) the following cases from some of the modern Turkic languages:

KbalkT *çapra-* (< *yap-rA-*)²⁰ ‘yaprak açmak // to come into leaf’ < OTu *yap-* ‘to cover, etc.’.

Kbalk. *ëzire-* (< *äz-rA-*)²¹ ‘mjatsja, davıtsja, razmjagčatsja; razvarivatsja’ < OTu *äz-* ‘to scratch’.

Tkm. *köpre-* (< **köp-rA-/°köpi-rA-*) ‘peniſsja, vspenivatsja, pokryvatsja penoj; vzmylivatsja’ < OTu **köp-/°köpi-* ‘to froth, foam’.

KbalkT *tebire-* ~ *tebre-* (< *täp-rA-*) ‘başlamak; harekete geçmek // to begin/start; to go into action’, cf. KbalkT *tep-* ‘hareket etmek, etc.’; Tkm.

come drunk’ of the verb-form *esir-* ~ *esre-* has in all probability emerged as a result of a metonymical semantic change from the meaning ‘sallanmak // swing; to be about to fall, totter’ through the association of the ideas of cause and effect.

¹⁸ I dealt with this question as concerns the denominal verb-forming suffix *+rA-* and the problem of its derivatives in detail in my study “Altaic etymologies: *töz*, *toprak*, *toyosun*”, TL 7.2003: 105-143.

¹⁹ Cf. KbalkT *sedire-* ‘çözölmek, açılmak; seyrelmek // to be untied; to become sparse’.

²⁰ Cf. KrchT *çapra-* ‘yaprak açmak’. I think it very likely that the Tu. *yaprak* developed from a verb-form **yapra-*, not from a form *yapurğak*, i.e., *yap-rA-k* > *yaprak* > KbalkT *çaprak*, BalkBoz. *čaprak* ‘list’.

²¹ The *-i-* seems to be an inorganic vowel in Kbalk., appearing relatively often, but not in every instance in front of *-rA-*, cf. *çapra-* (< *yap-rA-*), *tebre-* ~ *tebire-* (< *täp-rA-* / or *täp-I-rA-*?), etc.

depre- ‘starasjať, stremiťsja; bratsja’ < OTu *täprä-* ‘to move, stir, shake’ < *täp-* ‘to kick; to stamp; *to move’.²²

- KbalkT *tozura-* (< *tozu-rA-*) ‘iznašivatsja, obnašivatsja; vetšať; lohmatitsja’, cf. Uig. *tozu-* ‘razveivatsja, paspyljaťsja; razletatsja’ < *tozu-/tozi-* ‘to become dust, be covered with dust, dust rises, etc.’ < OTu *tōz* ‘dust’.²³
- Tkm. *yayra-* (< *yaδ-rA-*) ‘rasprostranjatsja; rassypatsja; protjagivatsja; širitsja’, Uig. *yayri-* (< *yayra-*) ‘čuvstvovat’ sebja legko, svobodno, naslaždat’sja svobodnoj, prostorom’, cf. Tkm. *yayrat-* (< *yaδ-rA-t-*) ‘rasprostranjat’, Uig. *yayrat-* ‘davat’ vozmožnost’ naslaždat’sja svobodnoj, čuvstvovat’ sebja svobodno, privolno; rasstilať’, etc. < OTu *yaδ-* ‘to spread out; to publish abroad’.

On the basis of the above arguments, I consider that the Tkm. *semre-*, the TrDS *semre-*, the TatSib. *sämre-*, the UigRaq. *sèmirät-*, the UigJar. *semire-t-* (and the TrDS *semirek*) must be analysed as **sämi-rA-*. Its linguistic geographical spread permits the conclusion that the various forms of *semre-* are not of late coinage, but go back to relatively old times.

Taking into account the evidence of the forms *sämiz*, *sämri-* ~ *semre-*, *sekiz*, *sekri-* ~ *sekre-* discussed here and of pre-examinations, I consider that in a majority of the instances concerning the question of rhotacism-zetacism, the question is not phonological, but morphological. I would only like to note that, on the basis of instances of the type **a**) Az. *yoz-* ~ Tat. *yura-*; Tu. *säz-* ~ Mo. *sere-*; **b**) Kzk. *kimiz* (~ *kimiran*) ~ Mo. *kimura-*; Tu. *aguz* (TrDS *avur*, *ağın*) ~ Mo. *uyuray*; **c**) Az. *sämiz-* ~ Tu. *sämri-*; **d**) Tu. *sämiz*, *sämri-*, etc., among others, it will be possible later (in some cases with absolute certainty, but in others only theoretically) to form categories such as **1**) *-(X)z-* ~ *-rA-*, **2**) *-(X)z*, *-rA-*, **3**) *-(X)z-* ~ *-(I)r-* / *-(U)r-*, **4**) *-(X)z*, *-(I)r-* / *-(U)r-*.

To summarize what has been said, the probable changes of the forms discussed above can be condensed in the following manner:

$$sem- < (*säm- \sim) *sämi- \left\{ \begin{array}{l} sämiz (> semir \rightarrow samär) > sämüz \\ sämir- (> sämir-I-) > sämiri- \sim sämri- \\ (*sämi-rA- >) semre- \sim sèmirät- \sim semiret-; semirek \end{array} \right.$$

Hakan Aydemir
Georg-August-Universität
Seminar für Turkologie und Zentralasienkunde
Waldweg 26
D – 37073 Göttingen

²² Although it cannot be confirmed from Old Turkic sources, on the basis of the meanings of this type in modern Turkic languages we must suppose polysemy, i.e., a meaning *‘to move’ for the verbal base *täp-* in early Turkic.

²³ For the problems concerning the verb-forms *tozu-* ~ *tozi-* ~ *toz-*, see my study mentioned in note 18.

Abbreviations

CC = Grønbech; **CCG** = German part of Codex Cumanicus; **CCI** = Italian part of Codex Cumanicus; **Ch** = Chuvash; **DLT** = s. EDPT and Dankoff & Kelly; **K** = Kipchak; **KarH** = Galician dialect of Karaim; **KarT** = Troki dialect of Karaim; **Kh** = Khalaj; **Khal.** = Khalkha; **Ma.** = Manchu, s. Hauer 1952-1955; **Mo.** = Mongolian; **MTu** = Middle Turkic; **NTu** = New Turkic; **O** = Oghuz; **OTu** = Old Turkic; **SSib** = South Siberian Turkic; **T** = Turki; **Tg.** = Tungus; **Tr.** = Turkish; **Tu.** = Turkic; **Y** = Yakut.

References

- Akın, A. (1946). *Aydın Oğulları Tarihi Hakkında bir Araştırma*. İstanbul.
- Az. = Azizbekov, H. A. (1965). *Azerbajdžansko-russkij slovař*. Baku.
- BalkBoz. = Boziev, A. Ju. (1962). *Materialy i issledovanija po balkarskoj dialektologii, leksike i folkloru*. Načik.
- Bang, W. K. (1916). Studien zur vergleichenden Grammatik der Türkssprachen: 3. Über das Possessivsuffix -si und einige seiner möglichen Verwandten. *SBAW* 51: 1236-1254.
- Biišev, A. (1965). Sootvetsvie -r // -z v altajskikh jazykah. *Issledovanija po ujugurskom jazyku – Ujgur tili bojiča täkšürüslär*. Alma-Ata. 192-205.
- Brockelmann, C. (1954). *Osttürkische Grammatik der islamischen Litteratur-sprachen Mittelasiens*. Leiden.
- BTT II = Röhrborn, K. (1971). *Eine uigurische Totenmesse. Text, Übersetzung, Kommentar*. (Berliner Turfantexte II). Berlin.
- Castrén, M. A. (1857). *Versuch einer koibalischen und karagassischen Sprachlehre nebst Wörterverzeichnissen aus den tatarischen Mundarten des Minussinschen Kreises*. St. Petersburg.
- Chuv. = Sirotkin, M. Ja. (1961). *Čuvaško-russkij slovař*. Moskva.
- ChuvAšm. = Ašmarin, N. I. (1927-1950). *Thesaurus linguae Tschuvaschorum*. 1-17. Kazań – Čeboksary.
- Dankoff & Kelly (1982-1985) = *Maḥmūd al-Kāšġarī. Compendium of the Turkic Dialects (Dīwān Luyāt at-Turk)*. 1-3. Edited and Translated with Introduction and Indices by R. Dankoff in collaboration with J. Kelly. Sources of Oriental Languages and Literatures. 7. Edited by Ş. Tekin – G. A. Tekin. Harvard University Printing Office.
- Doerfer, G. (1981-82). Zum Vokalismus nichtester Silben im Alttürkischen. *WZKM* 73 (1981): 47-87 and *WZKM* 74 (1981): 103-128.
- Dolg. = Stachowski, M. (1993). *Dolganischer Wortschatz*. Kraków.

- Dybo, A. V. (1996). *Semantičeskaja rekonstrukcija v altajskoj étimologii. So-matičeskie terminy (plečevoj pojas)*. Moskva.
- EDPT = Clauson, Sir G. (1972). *An Etymological Dictionary of Pre-Thirteenth-Century Turkish*. Oxford.
- Erdal, M. (1991). *Old Turkic Word Formation. A Functional Approach to the Lexicon*. 1-2. Turcologica. Wiesbaden.
- Gabain, A. von (1950²). *Alttürkische Grammatik*. Leipzig.
- Gag. = Baskakov, N. A. (1973). *Gagauzsko-russko-moldavskij slovar'*. Moskva.
- Grønbech, K. (1942). *Komanisches Wörterbuch. Türkischer Wortindex zu Codex Cumanicus*. Kopenhagen.
- Hauer, E. (1952-1955). *Handwörterbuch der Mandschusprache*. 1-3. Wiesbaden.
- Kar. = Baskakov, N. A. – Zajončkovskij, A. – Šapšal, S. M. (1974). *Karaimsko-russko-poľskij slovar'*. Moskva.
- Kbalk. = Tenišev, È. R. – Sujunčev, H. I. (1989). *Karačaevo-balkarsko-russkij slovar'*. Moskva.
- KbalkT = Tavkul, U. (2000). *Karaçay-Malkar Türkçesi Sözlüğü*. Ankara.
- Khak. = Baskakov, N. A. – Inkižekova-Grekul, A. I. (1953). *Hakassko-russkij slovar'*. Moskva.
- KhakKand., s. Castrén 1857.
- KhakKo., s. Castrén 1857.
- KhakSalb., s. Castrén 1857.
- Khoras. = Doerfer, G. – Hesse, W. (1993). *Chorasantürkisch. Wörterlisten, Kurzgrammatiken, Indices*. Wiesbaden.
- Kirg. = Judahin, K. K. (1965). *Kirgizsko-russkij slovar'*. Moskva.
- Kklp. = Baskakov, N. A. (1958). *Karakalpaksko-russkij slovar'*. Moskva.
- Kmk. = Bamatov, Z. Z. (1969). *Kumyksko-russkij slovar'*. Moskva.
- KrchT = Tavkul, U. (1989). Bařhüyük'ten derlenen Karaçayca sözler. *TDAYB*: 193-254.
- Kr-tat. = Asanov, Š. A. – Garkavec, A. N. – Useinov, S. M. (1988). *Krymskotasarsko-russkij slovar'*. Kiev.
- Kr-tatBas. = Baski I. (1986). A Crimean Turkic-Tatar Glossary from the 17th Century. *AOH* 40: 107-172.
- Kzk. = Mahmudov, H. – Musabaev, G. (1954). *Kazahsko-russkij slovar'*. Alma-Ata.
- Menges, K. H. (1965). Farbbezeichnungen in den Türkdialekten. (Review of I. Laude-Cirtautas (1961). *Der Gebrauch der Farbbezeichnungen in den Türkdialekten*. Wiesbaden). *Anthropos* 60: 825-832.
- Menges, K. H. (1995²). *The Turkic Languages and Peoples. An Introduction to Turkic Studies*. Wiesbaden.

- Miller, R. A. (1975). Japanese-Altaic Lexical Evidence and Proto-Turkic «Zetacism-Sigmatism». In: Ligeti, L. (ed.). *Researches in Altaic Languages*. Budapest. 157-172.
- Miller, R. A. (1987). Proto-Altaic *x-. *CAJ* 31: 19-63.
- Nog. = Baskakov, N. A. (1963). *Nogajsko-russkij slovar'*. Moskva.
- Oir. = Baskakov, N. A. – Toščakova, T. M. (1947). *Ojrotsko-russkij slovar'*. Moskva.
- OirCha. = Baskakov, N. A. (1985). *Dialekt lebedinskih tatar-čalkancev (kuu-kiži)*. Moskva.
- OirKu. = Baskakov, N. A. (1972). *Severnye dialekty altajskogo (ojrotskogo) jazyka. Dialekt kumandincev (kumandy-kiži). Grammatičeskij očerk, teksty, perevody i slovar'*. Moskva.
- OirTeRSK = Ryumina-Sırkaşeva, L. T. – Kuçigaşeva, N. A. (2000). *Teleüt Ağzı Sözlüğü*. Çev. Akalın, Ş. H. – Turgunbayev, C. Ankara.
- OirTu. = Baskakov, N. A. (1966). *Severnye dialekty altajskogo (ojrotskogo) jazyka. Dialekt černevyh tatar (tuba kiži). Grammatičeskij očerk i slovar'*. Moskva.
- Poppe, N. (1962). Die mongolische Lehnwörter im Komanischen. In: J. Eckmann – A. S. Levend – M. Mansuroğlu (eds). *Németh Armağanı*. 331-340.
- Poppe, N. (1973). Über die Bildungssuffixe der mongolischen Bezeichnungen der Körperteile. *UAJb* 45: 223-243.
- Poppe, N. (1974). Remarks on Comparative Study of the Vocabulary of the Altaic Languages. *UAJb* 46: 120-34.
- Poppe, N. (1976). Ancient Mongolian. In: W. Heissig – J. R. Krueger – F. J. Oinas – E. Schütz (eds.). *Tracta Altaica. Denis Sinor sexagenario optime de rebus altaicis merito dedicata*. Wiesbaden. 403-478.
- Posch, U. (1964). Die altaische Sprachverwandtschaft – Theorie oder Hypothese? *Handbuch der Orientalistik*. Erste Abteilung. V. Band. 2. Abschnitt. Leiden – Köln. 17-34.
- Pritsak, O. (1964). Der “Rhotazismus” und “Lambdazismus”. *UAJb* 35: 337-349.
- Ramstedt, G. J. (1952). *Einführung in die altaische Sprachwissenschaft*. 2. *Formenlehre*. Helsinki.
- Räsänen, M. (1957). *Materialien zur Morphologie der türkischen Sprachen*. Helsinki.
- Róna-Tas, A. (1970). *Az altaji nyelvrokonság vizsgálatának alapjai. A nyelvrokonság elmélete és a csuvas-mongol nyelvvizsny*. Budapest. (Unpublished dissertation.)
- Róna-Tas, A. (1998). The Reconstruction of Proto-Turkic and the Genetic Question. In: L. Johanson – Á. É. Csató (eds.). *The Turkic Languages*. London – New York. 67-80.
- Sal. = Tenišev, È. R. (1976). *Stroj salarskogo jazyka*. Moskva.

- SalKak. = Kakuk, Zs. (1962). Un vocabulaire salar. *AOH* 14: 173-196.
- ShorKo. = Verbickij, V. (1884). *Slovar' altajskago i aladagskago narečij tjurkskago jazyka*. Kazań.
- Ščerbak, A. M. (1987). Zetasizm-Rotasizm meselesi ve Türkçe ile Moğolca arasındaki münasebetlere dair bazı düşünceler. *TDAYB*: 281-88.
- Ščerbak, A. M. (1992/93). Sur le soi-disant rhotacisme mongolien. *AOH* 46: 323-26.
- Tat. = Golovkina, O. V. (1966). *Tatarsko-russkij slovar'*. Moskva.
- TatBa. = Dmitrieva, L. V. (1981). *Jazyk barabinskih tatar*. Leningrad.
- TatBulg. = Csáki, É. (1955). István Mándoky's Unpublished Tatar Wordlist from Bulgaria. *AOH* 48: 321-327.
- TatSib. = Tumaševa, D. G. (1992). *Slovar' dialektov sibirskih tatar*. Kazań.
- Tekin, T. (1969). Zetacism and Sigmatism in Proto-Turkic. *AOH* 22: 51-80.
- Tekin, T. (1975). Further Evidence for Zetacism and Sigmatism. In: L. Ligeti (ed.). *Researches in Altaic Languages*. Budapest. 157-72.
- Tekin, T. (1979). Once more Zetacism and Sigmatism. *CAJ* 23: 118-37.
- Tekin, T. (1986a). Zetacism and Sigmatism: Main Pillars of the Altaic Theory. *CAJ* 30: 141-160.
- Tekin, T. (1986b). Türkçe /ş/, Çuvaşça /š/, Moğolca /ç/. *TDAYB*: 71-75.
- Tekin, T. (1991). New Examples of Zetacism. *TDA*: 145-150.
- Tekin, T. (1994). Notes on Old Turkic Word Formation. *CAJ* 38: 244-281.
- Tekin, T. (1995). Relics of Altaic Stem-Final Vowels in Turkic. In: B. Kellner-Heinkele – M. Stachowski (eds.). *Laut- und Wortgeschichte der Türk-sprachen*. Wiesbaden. 73-87.
- Tekin, T. (1996). Yeni "Zetacism" Örnekleri. In: *Uluslararası Türk Dili Kongresi 1988* (26 Eylül 1988 – 3 Ekim 1988). Ankara. 81-83.
- Tkm. = Baskakov, N. A. – Karryev, B. A. – Hamzaev, M. Ja. (1968). *Turkmen-sko-russkij slovar'*. Moskva.
- Tofa = Rassadin, V. I. (1995). *Tofalarsko-russkij slovar', Russko-tofalarskij slovar'*. Irkutsk.
- TofaCast., s. Castrén 1857.
- TrDS = *Türkiye'de Halk Ağzından Derleme Sözlüğü*. 1-12. 2. Baskı (1993) Ankara.
- TrTDS = Haçerlioğlu, O. (1992). *Türk Dili Sözlüğü*. İstanbul.
- TrTTS = *Tanıklariyle Tarama Sözlüğü*. 1-7 (1963-1974). Ankara.
- Tuv. = Tenişev, È. R. (1968). *Tuvinsko-russkij slovar'*. Moskva.
- TuvCast., s. Castrén 1857.
- Türkay, C. (1979). *Başbakanlık Arşivi Belgelerine göre Osmanlı İmparatorluğunda Oymak Aşîret ve Cemaatlar*. İstanbul.
- Uig. = Nadžip, È. N. (1968). *Ujgursko-russkij slovar'*. Moskva.

- UigSin. = Malov, S. E. (1961). *Ujgurskie narečija Sińczjana. Teksty, perevody, slovař.* Moskva.
- UigJar. = Jarring, G. (1964). *An Eastern Turki-English Dialect Dictionary.* Lund.
- UigMal. = Malov, S. E. (1954). *Ujgurskij jazyk. Hamijskoe narečie. Teksty, perevody i slovař.* Moskva – Leningrad.
- UigRaq. = Raquette, G. (1927). *English-Turki Dictionary Based on the Dialects of Kashgar and Yarkand.* Lund.
- Uzb. = Borovkov, A. K. (1959). *Uzbeksko-russkij slovař.* Moskva.
- VEWT = Räsänen, M. (1969). *Versuch eines etymologischen Wörterbuchs der Türksprachen.* Helsinki.
- WMoL = Lessing, F. D. (1960). *Mongolian-English Dictionary.* Berkeley – Los Angeles.
- Yak. = Slepčova, P. A. (1972). *Jakutsko-russkij slovař.* Moskva.
- YUig. = Malov, S. E. (1957). *Jazyk želtyh ujugurov. Slovař i grammatika.* Alma-Ata.